

1648

# 7¹⁶⁰⁰

RAW SEQUENCE LISTING

DATE: 11/21/2002

PATENT APPLICATION: US/09/863,054

TIME: 14:22:03

Input Set : A:\-4-2-1.app

Output Set: N:\CRF4\11212002\I863054.raw

SEQUENCE LISTING

4 (1) GENERAL INFORMATION:
6 (i) APPLICANT: Chisari, Francis V.
8 (ii) TITLE OF INVENTION: Peptides for Inducing Cytotoxic T
9 Lymphocyte Responses to Hepatitis B Virus
11 (iii) NUMBER OF SEQUENCES: 57
13 (iv) CORRESPONDENCE ADDRESS:
14 (A) ADDRESSEE: Townsend and Townsend and Crew LLP
15 (B) STREET: Two Embarcadero Center, Eighth Floor
16 (C) CITY: San Francisco
17 (D) STATE: California
18 (E) COUNTRY: USA
19 (F) ZIP: 94111-3834
21 (v) COMPUTER READABLE FORM:
22 (A) MEDIUM TYPE: Floppy disk
23 (B) COMPUTER: IBM PC compatible
24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
25 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
27 (vi) CURRENT APPLICATION DATA:
C--> 28 (A) APPLICATION NUMBER: US/09/863,054
C--> 29 (B) FILING DATE: 21-May-2001
30 (C) CLASSIFICATION:
44 (vii) PRIOR APPLICATION DATA:
33 (A) APPLICATION NUMBER: US 07/935,898
34 (B) FILING DATE: 26-AUG-1992
37 (A) APPLICATION NUMBER: US 08/024,120
38 (B) FILING DATE: 26-FEB-1993
41 (A) APPLICATION NUMBER: US 08/396,283
42 (B) FILING DATE: 27-FEB-1995
45 (A) APPLICATION NUMBER: US 08/463,486
46 (B) FILING DATE: 05-JUN-1995
48 (viii) ATTORNEY/AGENT INFORMATION:
49 (A) NAME: Lockyer, Jean M.
50 (B) REGISTRATION NUMBER: 44,879
51 (C) REFERENCE/DOCKET NUMBER: 014740-000421US
53 (ix) TELECOMMUNICATION INFORMATION:
54 (A) TELEPHONE: (415) 576-0200
55 (B) TELEFAX: (415) 576-0300
58 (2) INFORMATION FOR SEQ ID NO: 1:
60 (i) SEQUENCE CHARACTERISTICS:
61 (A) LENGTH: 9 amino acids
62 (B) TYPE: amino acid
63 (C) STRANDEDNESS:

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64      (D) TOPOLOGY: linear
66      (ii) MOLECULE TYPE: peptide
69      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
71      Phe Leu Leu Thr Arg Ile Leu Thr Ile
72      1          5
75 (2) INFORMATION FOR SEQ ID NO: 2:
77      (i) SEQUENCE CHARACTERISTICS:
78          (A) LENGTH: 13 amino acids
79          (B) TYPE: amino acid
80          (C) STRANDEDNESS:
81          (D) TOPOLOGY: linear
83      (ii) MOLECULE TYPE: peptide
86      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
88      Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu
89      1          5          10
92 (2) INFORMATION FOR SEQ ID NO: 3:
94      (i) SEQUENCE CHARACTERISTICS:
95          (A) LENGTH: 10 amino acids
96          (B) TYPE: amino acid
97          (C) STRANDEDNESS:
98          (D) TOPOLOGY: linear
100     (ii) MOLECULE TYPE: peptide
103     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
105     Phe Ile Leu Leu Leu Cys Leu Ile Phe Leu
106     1          5          10
109 (2) INFORMATION FOR SEQ ID NO: 4:
111     (i) SEQUENCE CHARACTERISTICS:
112         (A) LENGTH: 9 amino acids
113         (B) TYPE: amino acid
114         (C) STRANDEDNESS:
115         (D) TOPOLOGY: linear
117     (ii) MOLECULE TYPE: peptide
120     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
122     Ile Leu Leu Leu Cys Leu Ile Phe Leu
123     1          5
126 (2) INFORMATION FOR SEQ ID NO: 5:
128     (i) SEQUENCE CHARACTERISTICS:
129         (A) LENGTH: 10 amino acids
130         (B) TYPE: amino acid
131         (C) STRANDEDNESS:
132         (D) TOPOLOGY: linear
134     (ii) MOLECULE TYPE: peptide
137     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
139     Ile Leu Leu Leu Cys Leu Ile Phe Leu Leu
140     1          5          10
143 (2) INFORMATION FOR SEQ ID NO: 6:
145     (i) SEQUENCE CHARACTERISTICS:
146         (A) LENGTH: 9 amino acids
147         (B) TYPE: amino acid

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148         (C) STRANDEDNESS:
149         (D) TOPOLOGY: linear
151     (ii) MOLECULE TYPE: peptide
154     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
156     Leu Leu Leu Cys Leu Ile Phe Leu Leu
157         1             5
160 (2) INFORMATION FOR SEQ ID NO: 7:
162     (i) SEQUENCE CHARACTERISTICS:
163         (A) LENGTH: 9 amino acids
164         (B) TYPE: amino acid
165         (C) STRANDEDNESS:
166         (D) TOPOLOGY: linear
168     (ii) MOLECULE TYPE: peptide
171     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
173     Leu Leu Cys Leu Ile Phe Leu Leu Val
174         1             5
177 (2) INFORMATION FOR SEQ ID NO: 8:
179     (i) SEQUENCE CHARACTERISTICS:
180         (A) LENGTH: 11 amino acids
181         (B) TYPE: amino acid
182         (C) STRANDEDNESS:
183         (D) TOPOLOGY: linear
185     (ii) MOLECULE TYPE: peptide
188     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
190     Leu Leu Leu Cys Leu Ile Phe Leu Leu Val Leu
191         1             5             10
194 (2) INFORMATION FOR SEQ ID NO: 9:
196     (i) SEQUENCE CHARACTERISTICS:
197         (A) LENGTH: 10 amino acids
198         (B) TYPE: amino acid
199         (C) STRANDEDNESS:
200         (D) TOPOLOGY: linear
202     (ii) MOLECULE TYPE: peptide
205     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
207     Leu Leu Asp Tyr Gln Gly Met Leu Pro Val
208         1             5             10
211 (2) INFORMATION FOR SEQ ID NO: 10:
213     (i) SEQUENCE CHARACTERISTICS:
214         (A) LENGTH: 9 amino acids
215         (B) TYPE: amino acid
216         (C) STRANDEDNESS:
217         (D) TOPOLOGY: linear
219     (ii) MOLECULE TYPE: peptide
222     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
224     Trp Leu Ser Leu Leu Val Pro Phe Val
225         1             5
228 (2) INFORMATION FOR SEQ ID NO: 11:
230     (i) SEQUENCE CHARACTERISTICS:
231         (A) LENGTH: 10 amino acids

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232         (B) TYPE: amino acid
233         (C) STRANDEDNESS:
234         (D) TOPOLOGY: linear
236     (ii) MOLECULE TYPE: peptide
239     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
241         Ser Ile Leu Ser Lys Thr Gly Asp Pro Val
242         1             5             10
245 (2) INFORMATION FOR SEQ ID NO: 12:
247     (i) SEQUENCE CHARACTERISTICS:
248         (A) LENGTH: 9 amino acids
249         (B) TYPE: amino acid
250         (C) STRANDEDNESS:
251         (D) TOPOLOGY: linear
253     (ii) MOLECULE TYPE: peptide
256     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
258         Val Leu Gln Ala Gly Phe Phe Leu Leu
259         1             5
262 (2) INFORMATION FOR SEQ ID NO: 13:
264     (i) SEQUENCE CHARACTERISTICS:
265         (A) LENGTH: 9 amino acids
266         (B) TYPE: amino acid
267         (C) STRANDEDNESS:
268         (D) TOPOLOGY: linear
270     (ii) MOLECULE TYPE: peptide
273     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
275         Phe Leu Gly Gly Thr Pro Val Cys Leu
276         1             5
279 (2) INFORMATION FOR SEQ ID NO: 14:
281     (i) SEQUENCE CHARACTERISTICS:
282         (A) LENGTH: 10 amino acids
283         (B) TYPE: amino acid
284         (C) STRANDEDNESS:
285         (D) TOPOLOGY: linear
287     (ii) MOLECULE TYPE: peptide
290     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
292         Ser Ile Val Ser Pro Phe Ile Pro Leu Leu
293         1             5             10
296 (2) INFORMATION FOR SEQ ID NO: 15:
298     (i) SEQUENCE CHARACTERISTICS:
299         (A) LENGTH: 10 amino acids
300         (B) TYPE: amino acid
301         (C) STRANDEDNESS:
302         (D) TOPOLOGY: linear
304     (ii) MOLECULE TYPE: peptide
307     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
309         Ser Trp Leu Ser Leu Leu Val Pro Phe Val
310         1             5             10
313 (2) INFORMATION FOR SEQ ID NO: 16:
315     (i) SEQUENCE CHARACTERISTICS:

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Input Set : A:\-4-2-1.app

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316      (A) LENGTH: 10 amino acids
317      (B) TYPE: amino acid
318      (C) STRANDEDNESS:
319      (D) TOPOLOGY: linear
321      (ii) MOLECULE TYPE: peptide
324      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
326      Trp Leu Ser Leu Leu Val Pro Phe Val Gln
327      1          5          10
330 (2) INFORMATION FOR SEQ ID NO: 17:
332      (i) SEQUENCE CHARACTERISTICS:
333          (A) LENGTH: 20 amino acids
334          (B) TYPE: amino acid
335          (C) STRANDEDNESS:
336          (D) TOPOLOGY: linear
338      (ii) MOLECULE TYPE: peptide
341      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
343      Met Asp Ile Asp Pro Tyr Lys Glu Phe Gly Ala Thr Val Glu Leu Leu
344      1          5          10          15
346      Ser Phe Leu Pro
347          20
350 (2) INFORMATION FOR SEQ ID NO: 18:
352      (i) SEQUENCE CHARACTERISTICS:
353          (A) LENGTH: 20 amino acids
354          (B) TYPE: amino acid
355          (C) STRANDEDNESS:
356          (D) TOPOLOGY: linear
358      (ii) MOLECULE TYPE: peptide
361      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
363      Pro His His Tyr Ala Leu Arg Gln Ala Ile Leu Cys Trp Gly Glu Leu
364      1          5          10          15
366      Met Tyr Leu Ala
367          20
370 (2) INFORMATION FOR SEQ ID NO: 19:
372      (i) SEQUENCE CHARACTERISTICS:
373          (A) LENGTH: 20 amino acids
374          (B) TYPE: amino acid
375          (C) STRANDEDNESS:
376          (D) TOPOLOGY: linear
378      (ii) MOLECULE TYPE: peptide
381      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
383      Leu Leu Trp Phe His Ile Ser Cys Leu Thr Phe Gly Arg Glu Thr Val
384      1          5          10          15
386      Ile Glu Tyr Leu
387          20
390 (2) INFORMATION FOR SEQ ID NO: 20:
392      (i) SEQUENCE CHARACTERISTICS:
393          (A) LENGTH: 15 amino acids
394          (B) TYPE: amino acid
395          (C) STRANDEDNESS:

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/863,054

DATE: 11/21/2002

TIME: 14:22:04

Input Set : A:\-4-2-1.app

Output Set: N:\CRF4\11212002\I863054.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]